The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARCO WINTER

Appeal 2006-3145
Application 09/469,865
Technology Center 2600

Decided: January 26, 2007

Before LANCE LEONARD BARRY, MAHSHID D. SAADAT, and ALLEN R. MACDONALD, *Administrative Patent Judges*.

MACDONALD, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1-12, the only claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

The claims are directed to a replay appliance that accesses information stored on recording medium (e.g., a DVD) at a defined playing time. In particular, the replay appliance drives a scanning device using a binary

search to a point on the recording medium that corresponds to the access point defined by the playing time. Such a feature enables accessing information on the medium at a defined playing time despite the absence of a concordance list that correlates replay time with recording location. Claim 1 is illustrative.

1. Replay appliance for accessing at a defined playing time information stored on recording media containing information blocks, the appliance comprising:

a scanning device for scanning data on a recording medium;

search means for binary searching of the recording medium on the basis of a replay time; and

a comparator for comparing a replay time which has been scanned from the recording medium with a desired replay time, wherein the scanning device scans the recording medium at a point which corresponds to a result of a comparison by the comparator to access at the defined playing time.

The Examiner relies on the following prior art references to show unpatentability:

Carter	US 5,845,331	Dec. 1, 1998
Kawamura	US 6,075,920	Jun. 13, 2000 (filed Oct. 31, 1995)

The rejections[1] as presented by the Examiner are as follows:

1. Claims 1, 2, and 4-10 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kawamura.

2. Claims 3, 11, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawamura in view of Carter.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner and the evidence of anticipation and obviousness relied upon by the Examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the Appellant's arguments set forth in the Brief along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answer. Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Brief and the Answer for the respective details thereof.

It is our view, after consideration of the record before us, that the disclosure of Kawamura does not meet the invention as set forth in claims 1, 2, and 4-10. We also find that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the

[1] We note that the Examiner's Answer does not expressly state the Examiner's grounds of rejection, but instead refers to a previous Office Action (Answer 3). Such incorporations by reference, however, are improper under current practice. *See* MPEP § 1207.02 ("An examiner's answer should not refer, either directly or indirectly, to any prior Office action without fully restating the point relied on in the answer."). *See also Ex parte Metcalf*, 67 USPQ2d 1633, 1635 n.1 (BPAI 2003).

art the invention as set forth in claims 3, 11, and 12. Accordingly, we reverse.

We first consider the Examiner's rejection of claims 1, 2, and 4-10 under 35 U.S.C. § 102(e). The Examiner has indicated how the claimed invention is deemed to be fully met by the disclosure of Kawamura (Final Rejection 3-4). Regarding independent claim 1, Appellant argues that Kawamura does not disclose a replay appliance comprising, among other things, (1) a scanning device, (2) a search means for binary searching the recording medium on the basis of a replay time, and (3) a comparator that performs the recited functions. Rather, Kawamura teaches only searching time code information recorded in each sector of a recording medium based on a specified time code and moving a pickup to the appropriate sector of the medium (Br. 5).

The Examiner responds with four main arguments. First, the Examiner notes that the claimed invention does not recite a sequence of events for searching recorded media, but rather recites a device that searches a medium based on a replay time data signal recorded on the medium (Answer 3-4). Second, the Examiner argues that Kawamura's scanning device corresponds to Kawamura's pickup since the pickup scans the data recorded on the disc (Answer 4). Third, the Examiner contends that Kawamura discloses a search means that performs a binary search in view of Kawamura's time-code based search which, according to the Examiner, is based on a "binary" time code format. Also, the Examiner notes that Kawamura compares the accessed replay time with the desired replay time (*Id.*).

We will not sustain the Examiner's anticipation rejection essentially for one limitation that, in our view, is missing from Kawamura. Specifically, we disagree with the Examiner that Kawamura discloses expressly or inherently a search means for *binary searching* the recording medium on the basis of a replay time as claimed in independent claim 1.

As well known in the art, binary searching is a specific technique that searches for a value within a given search interval by repeatedly dividing the search interval in half. That is, a binary search finds the median of the interval, compares the desired value with the median to determine whether the desired value is higher or lower than the median, and searches the remaining half in the same manner.[2] Such an interpretation of "binary search" is entirely consistent with Appellant's disclosure, particularly noting the arrows in Steps S1-S4 in the figure that clearly illustrate a binary search.

The Examiner's reliance on col. 14, ll. 55-56 and col. 5, ll. 58-67 (Answer 4) for allegedly disclosing a binary search is unavailing. Kawamura's search is based on comparing a stored time code with a user-specified time code (Kawamura, col. 14, ll. 54-60). Although the time code is in a Binary Coded Decimal (BCD) format (Kawamura, col. 5, ll. 65-67) as the Examiner indicates, Kawamura's search hardly qualifies as a "binary search" as the term is understood by skilled artisans. In fact, Kawamura is silent regarding the specific search technique employed.

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[2] *See* Paul E. Black, *Binary Search*, *in* Dictionary of Algorithms and Data Structures, U.S. Nat'l Inst. Of Standards & Tech., Oct. 27, 2005, *available at* http://www.nist.gov/dads/HTML/binarySearch.html (last visited Jan. 12, 2007). *See also Binary Search Algorithm*, Wikipedia, *at* http://en.wikipedia.org/wiki/Binary_search_algorithm (last visited Jan. 12, 2007).

We recognize that claim limitations must be "given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). But the broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *In re Cortright*, 165 F.3d 1353, 1358, 49 USPQ2d 1464, 1467 (Fed. Cir. 1999). *See also* MPEP § 2111. Merely because a BCD time code is used as a basis for the search does not transform the search into a "binary search" – a particular search technique recognized by skilled artisans as noted above.

Notwithstanding our disagreement with the Examiner regarding the binary search limitation, we nevertheless agree with the Examiner that Kawamura reasonably discloses all other limitations of independent claim 1. We cannot say that no other prior art exists that would render utilizing a binary search in conjunction with the other claimed limitations unpatentable. We can say, however, that no such prior art exists on this record.[3]
For the above reasons, we will not sustain the Examiner's anticipation rejection of independent claim 1. Likewise, we will not sustain the Examiner's rejection of dependent claims 2 and 4-10.

With regard to the obviousness rejection of dependent claims 3, 11, and 12, the examiner adds Carter to the teachings of Kawamura (Final Rejection 5). But since Carter does not cure the deficiencies noted above

[3] We refer the Examiner, however, to U.S. Pat. 5,706,261 to Udagawa which teaches determining the boundary between recorded and unrecorded areas on an optical disc using, in part, a binary search). *See* Fig. 4 and col. 6, l. 5 – col. 7, l. 17. We leave the determination of whether such a teaching is reasonably combinable with Kawamura to the Examiner.

with respect to independent claim 1, the rejection of claims 3, 11, and 12 is also not sustained.

In summary, we have not sustained the Examiner's rejection with respect to any of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-12 is reversed.

REVERSED

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